

REMARKS/ARGUMENTS

Claims 46-53 and 60-65 are active in this application.

The claims are amended for clarity. The title and Abstract have been amended in accordance with the suggestions provided on page 3 of the Office Action.

No new matter is believed to have been added by these amendments.

The claim objections and the rejection under 35 USC 112, second paragraph noted by the Office have been addressed in these amendments as well.

The Examiner has rejected Claims 49, 50, 55 and 59 for lack of support under 35 USC 112, first paragraph and thus considers the limitations in those claims new matter. However, attention is directed to the specification at page 12, lines 11-16 which clearly supports these claims, reproduced below (emphasis added):

By attenuation measures, the activity or concentration of the corresponding protein is in general reduced to 0 to 75%, 0 to 50%, 0 to 25%, 0 to 10% or 0 to 5% of the activity or concentration of the wild-type protein or of the activity or concentration of the protein in the starting microorganism.

35 USC §120 addresses the situations in which an applicant may claim priority from an earlier-filed application and states that:

“An application for patent for an invention disclosed in the manner provided by the first paragraph of section 112 of this title in an application previously filed in the United States....shall have the same effect as to such inventions, as though filed on the date of the prior application.”

35 USC §112, first paragraph states that:

“The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same.”

Thus, in order for the present application to successfully claim priority to the 2002 filing, the disclosure of the specified percentages must constitute a description sufficient to meet the requirements of 35 USC §112, first paragraph.

The test for sufficiency of support in a parent application is whether the disclosure of the application relied upon for priority reasonably conveys to the person of skill in the art that the inventor had possession at that time of the later claimed subject matter. *Ralston Purina Co. v. Far-Mar-Co., Inc.*, 772 F.2d 1570, 1575 (Fed. Cir. 1985). Where specific examples are used to support a claim to a range, the examples must, when taken together with the knowledge of persons skilled in the art, point to the claimed range. *In re Lukach*, 442 F.2d 967, 970 (CCPA 1971). In the present situation, the specification as filed on January 30, 2002 clearly supports these limitations.¹

Accordingly, withdrawal of this rejection is requested. , both of the rejections should be withdrawn.

On the basis of the new matter rejection noted above, the Examiner has raised two rejections in view of Tzvetkov (2003) (one on page 15 of the Office Action and one on page 17 of the Office Action). However, as the claims of this application are clearly described in the application as originally filed in the parent on January 30, 2002, Applicants request that this rejection be withdrawn as well.

The Examiner has also rejected Claims 47 and 54-65 under 35 USC 112, first paragraph based on the inclusion of modifying the bacteria by reducing enzymatic activity. In

¹ See also, *In re Wertheim*, 541 F.2d 257 (CCPA 1976).where the parent claimed 25-60% and had examples at 35% and 50%, and the application at issue claimed 35-50%;

addition, Claims 46 and 54-55 were rejected under 35 USC 112, first paragraph for alleged lack of enablement. It is noted that the Examiner has not made a similar rejection to reducing expression of the gene or a polynucleotide encoding the enzyme. As evident from the claim amendment submitted herein, the reference to reducing enzymatic activity has been removed from the claims. Accordingly, withdrawal of these two rejections is requested.

The rejections of Claims 62 and 63 and 62-64 under 35 USC 112, first paragraph (written description and enablement) as relating to secondary gene/protein modification, i.e., *lysC*, *lysE*, *zwa1* and *zwa2*, are respectfully traversed.

As amended, the claims have been clarified to define that the bacterium are modified to express an increase or reduced amount of the gene products defined by the genes.

Each of the *lysC*, *lysE*, *zwa1* and *zwa2* genes and their correspond proteins/enzymatic products are known in the art as described in the specification on page 25-27. In addition, evidence that the structure of a feedback resistant aspartate kinase encoded by the *lysC* was known is shown in the attached two patents, US patent no. 5,688,671 and US patent no. 6,893,848 (copies attached). Moreover, since the proteins and genes are known modifying a bacteria to overexpress the gene or reduce and/or delete the gene is well-within the skill in this field. In fact, the specification on pages 24-27 describes these well-known protocols by increasing copy number, using a strong promoter, and/or making a deletion mutant via homologous recombination.

Accordingly, withdrawal of these rejections is requested.

The rejection of Claims 46-53 and 60-65 under 35 USC 112, first paragraph is respectfully traversed.

The method claimed in claim 46 clearly defines that the bacteria is modified to express a reduced level of the otsA gene product, which is a trehalose 6-phosphate synthase which when suitably cultured produces L-amino acids. As shown in the Examples section of this application when a bacterial strain having a deletion in the otsA gene was cultured in a nutrient medium suitable for the production of the amino acid lysine, the culture supernatant analyzed showed increased levels of the amino acid compared to a bacterial strain that had not been modified in this manner (see pages 44-47 of the application).

Accordingly, withdrawal of this rejection is requested.

The rejection of Claims 46-48, 51-53, 60-62 and 65 under 35 USC 102(e) in view of U.S. Patent Publication 2002/0137150 is respectfully traversed. The earliest prior art date of this publication is July 2, 2001 and is after both of the German priority application filing dates. To perfect priority to these German applications, certified English translations are attached hereto. Accordingly, withdrawal of this rejection is requested.

Application No. 10/801,847

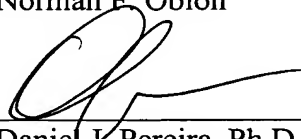
Reply to Office Action of February 23, 2006

A Notice of Allowance for all pending claims is requested.

Respectfully submitted,

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